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ABSTRACT

Developed by educators from the Emily Griffith Opportunity School for a workplace literacy program for the nutrition areas of a health care organization, this teacher's guide for a 4-hour workshop concentrates on teaching employees how to learn. Materials are presented in one 4-hour workshop. Learning strategies based on Neuro-Linguistic Programming (NLP), whole brain, and Educational Kinesiology technologies are discussed. Examples of materials to be learned are taken from culinary content areas. The materials include activities to help students "meet their mind" and teacher's information. Lessons includes objectives, materials, suggested time limits, and activity narratives. Six appendixes contain the following: meet your mind questions, brain warm-ups, about flying fish (picture-story activity), eye accessing questions, spelling strategy, and a sample class announcement. Handouts are provided for activities. Contains seven references. (KC)

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MEET YOUR MIND

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May 20, 1994

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MEET YOUR MIND

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Dee Sweeney

May 20, 1994

INTRODUCTION TO THE WORKPLACE LITERACY PROJECT

This module was developed by educators from Emily Griffith Opportunity School as part of a National Workplace Education grant funded by the U.S. Department of Education. A cooperative effort between the business and education communities, the program was designed specifically to enhance employees' literacy skills.

Direct benefits to the workforce include improved morale and motivation, self-esteem, team work, and promotional opportunities.

We gratefully acknowledge the assistance of our partners. In addition we recognize all of the students who participated in classes and who provided us with invaluable feedback for strengthening future classes.

We hope partnerships such as these will provide the catalyst for developing new or continued on-site educational opportunities.

This curriculum, **Meet Your Mind**, was developed for the nutrition areas of a health care organization to provide their employees with "how to learn" skills. This effort recognized that a significant number of the food services employees were involved in basic skills, culinary or nutrition education and that it would be useful to them to acquire enhanced study skills. These skills could be used directly on the job for learning new material or procedures.

The workshop was presented in one four hour session. It could easily be done in two two hour sessions. Examples of materials to be learned were taken from the culinary curriculum, based on the focus of the students. Other content areas could be substituted for inclusion in the presentation.

The workshop presents learning strategies based on Neuro-Linguistic Programming (NLP), whole brain and Educational Kinesiology technologies. It is intended to provide participants with a choice of specific learning tools and an understanding of how to use them to make learning faster and easier. The workshop was developed by Learning Connections and is used with their permission.

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MEET YOU MIND

Objectives: Present concepts
Introduce specific learning strategies for reading comprehension, spelling, and vocabulary

Materials: Handouts
Flip chart or paper
Markers
Overhead or flip charts for illustrations
Cards for spelling strategy

TIME	ACTIVITY
10 min.	Introduction. Introduction of course, introduction of teacher, goals of course. Student introductions and goals.
10 min.	Meet Your Mind questions. Overview workshop format, agenda, housekeeping.
25 min.	Right/Left brain characteristics. Whole brain exercises (Brain Gym).
15 min.	NLP concepts.

TIME	ACTIVITY
10 min.	Break.
10 min.	Auditory and visual memory comparison.
20 min.	Reading comprehension strategy - use flying fish story.
15 min.	Spelling and vocabulary strategy - use terminology from recipes.
5 min.	Summary and what's next.

MEET YOUR MIND

Objectives: Add power and flexibility to the basic strategies learned in Part 1.

Materials:
Handouts
Flip chart and paper
Markers for each student
Large paper like computer paper for student mindmap practice
Cards for spelling strategy
Dictionary

TIME	ACTIVITY
20 min.	Sharing and questions from Part 1. Review. Exercises.
25 min.	Chunking concepts. Apply to the spelling strategy - use recipe terminology. Other uses of chunking - use text example.
15 min.	Mindmapping - demonstrate using sauces .
10 min.	Break.

TIME	ACTIVITY
20 min.	Previewing/practice mindmap - use textbook extracts on sauces to walk through the principles of previewing. Give an example of information without a reference point to illustrate why we mindmap.
10 min.	Review - use text and vocabulary examples.
5 min.	Opening the lens.
10 min.	Questions and answers/ check back to student goals. Summary.
5 min.	Evaluations.

TEACHER'S INFORMATION

PART ONE

INTRODUCTION

The Introduction to the course is intended to warm the students to the topic and to acquaint the instructor with specific learning goals of the students. The course objective is to provide students with tools that will make their learning endeavors faster and easier and for them to "meet their mind".

MEET YOU MIND QUESTIONS

(Handout - Meet Your Mind Questions)

These questions are done orally. They are intended to intrigue the participants and to provide additional bits of information to let the students know what they will get during the workshop. (See questionnaire and answers in the appendix.)

WORKSHOP OVERVIEW

The course is about how to learn, not what to learn. The content used for illustration purposes came from the nutrition area, but could be taken from any work area.

The course introduces students to right, left and whole brain learning concepts, the NLP thinking model, basic learning "hand" tools and learning "power" tools.

Tools make a great analogy. Just as hammering in a nail with a screwdriver is slow, difficult, and frustrating, using an inappropriate learning strategy or thinking process creates difficulty in learning.

Once you use the right tool for pounding in a nail, a hammer, the job is much faster and easier. There is an obvious match between the task to be done and the tool. So too with our "brain tools". Using the right thinking process makes the learning task faster and easier.

How long does it take to learn these strategies? It's like learning to use a hammer. The teaching part would take about five minutes. Then a few minutes practice a day would give you fluidity and automatic motions.

Just as a hammer is not a better tool than a screwdriver, except when you want to hammer a nail, one thinking strategy is not better than another, except when it is applied to a specific learning task for which it is suited.

The hammer, screwdriver and saw of learning strategies are the spelling, reading comprehension and vocabulary strategies. By the end of the first half of the workshop, we will have covered the

concepts behind these learning strategies, brain warm-ups and the "hand tools" of learning.

In the second half, we will put power to those tools. Just as adding a power cord to a saw, hammer and screwdriver allows you to build a house faster and more easily, adding power to the basic learning strategies will enable you to handle a wide variety of learning tasks faster and more easily.

RIGHT/LEFT BRAIN CHARACTERISTICS

(Handout - Left/Right Brain Mind Map)

Left	Right
Controls right side	Controls left side
Sequential	Patterns
Verbal	Visual/pictures
Analyzes by taking apart	Holistic
Black and White	Shades
	Makes Leaps

Most of us have a preference for one type of thinking or the other, and most of us alternately use both sides. However, the brain is really more powerful when both sides of the brain are talking to each other and working as partners. Whole brain is always better than 1/2 brain for learning activities.

So our first objective is to get both sides in conversation. This can be facilitated through exercises to warm up the "engine". Just as we warm up our car engine on a cold day before driving off, it works to warm-up our brain before we sit down to use it.

BRAIN WARM-UPS/EXERCISES

(Handout - Brain Warm-Ups)

The exercises in Appendix B are used as a brain warm-up and work by "forcing" the brain into a whole brain thinking mode. The exercises are a few in a series of exercises developed by Paul Dennison, author of Brain Gym. They help to get the left and right brains jointly engaged, in part because they require simultaneous movement by both sides of the body. Sometimes the eyes are also involved in motions that cross the midline of the body.

In addition to doing the exercises frequently, it is important to drink water. Just as a car battery requires water to do its job, the brain needs water to keep the electrical impulses going that take place with brain activity. See the Appendix under "Brain Warm-ups."

NLP CONCEPTS

Neuro-Linguistic programming (NLP) contributed several major concepts that can assist us in being effective learners.

1. When we receive information, we process it internally in a visual, kinesthetic, and auditory mode. In other words, we represent the information in pictures, emotional and tactile feelings, and sounds. We also use our taste and olfactory modes; however, we will not be using them in our learning strategies.

2. We process in one mode at a time and we may very quickly switch from one mode to the other.

3. Our unconscious eye movements reflect the type of internal processing or thinking that we are doing. Our eyes move in consistent ways for each type of processing. Our eyes go up for visual processing, to the ears for auditory processing, and down for kinesthetic and self-talk processing. About 80% of us remember pictures and sounds to our left and construct new pictures and sounds to our right.

4. It is possible to determine the kind of sequence of internal thinking process that someone is using by observing his eye movements while he is completing a task.

Let the class experiment with this information. You can have the students close and relax their eyes and have them just notice what their eyes do when you ask a series of questions. You can also have students pair up. One student thinks of the answer to your questions with eyes open and relaxed. The other student observes the eye movements. This is a silent process. Have the students switch roles and ask a second set of questions. See "Eye Accessing Questions" in the Appendix.

So, what does this information have to do with learning? Let's use the learning task of spelling to address that question. With the above information, we were able to model or observe people performing specific learning tasks, both successfully and unsuccessfully. We could then compare their thinking strategies and compare consistencies and differences.

When we did this for spelling, we found that good spellers shared a consistent thinking strategy. They "see" the word, and then "feel" if it is right or that they know it. Poor spellers do not use this same strategy. Training in phonics, spelling rules, etc. was not consistent in either group.

Can the internal thinking strategy used by good spellers be taught to poor spellers? Will it make poor spellers into good spellers? Again, the NLP thinking model assists us. We discovered that a person's internal processing can be influenced by eye position. In other words, if we want to make pictures, we can position our eyes up. When we want to check feelings, we can position the eyes down. Experience indicates that a poor speller can be taught how to spell by teaching him the thinking strategy that good spellers use.

Have your students experience the effect of eye position on internal processing. With their head held straight ahead ask them to look down as far as they can and move their right hand while you give them directions to someplace. The instructions should include visual predicates such as picture, see yourself, picture a map in your head, get a clear sense, etc. For example, "When you leave the classroom, see yourself turning right, then walk until you see the elevator. Opposite the elevator is the exit. Go out this exit and turn right. You will see a 7-Eleven. Turn left at that street and continue until you see a black glass tall 10-story building, the only one in the area. The next building on the same side of the street is red brick and white trim. This is the house you are looking for."

Ask students what happened. Many students will report that their eyes would not stay still. Some will indicate that they could not keep their eyes down. This makes sense. You asked them to perform an essentially internal visual task, make an internal map, with their eyes down in kinesthetic mode. Their eyes wanted to go up into visual space to make pictures.

Effective long term memory tasks such as spelling, vocabulary, and reading retention include visual processing as a key component. We will use eye position to facilitate visual processing.

AUDITORY VS. VISUAL MEMORY

Auditory memory	Visual memory
Sequential	Random Access
Rote/Short Term	Long Term
Like a tape	Fast
Sounds, Rhythm	Pictures/Concepts

Visual memory is not inherently better than auditory memory (auditory memory is very important when you are a musician, for instance), but visual memory is important for long term memory strategies such as spelling, reading retention and vocabulary.

For these learning tasks, visual memory is more efficient and more flexible than auditory memory. (For example, think about how waiters might be remembering the specials for the day. The waiter who has a hard time getting started again after being interrupted in the middle of his spiel is probably using auditory memory. The waiter who has no trouble resuming his spiel is probably "reading" his images of the blackboard or "looking" at the plate with the specials on it and describing it. When he is interrupted, he simply goes back to "reading" or describing his "picture".

You also can use an alphabet example for illustration. Have participants figure out the 18th letter of the alphabet, then the letter that comes before "j". Then ask how they got their result. Most of the group will have included an auditory sequence to get the answer.

READING COMPREHENSION

(Handout - Reading Comprehension Strategy)

The strategy is based on the assumption that reading comprehension comes from making pictures or concepts of what is being read. Those who do this intuitively think that everybody does so, but not everybody does. Some people do it only on certain kinds of material and don't know why their results are inconsistent.

To train the brain to do this automatically when presented with any reading material, start by reading a sentence, pause to determine what it means, and then create a "picture" in visual space (eyes up). Reread if necessary. Then to the next sentence. This should be done daily for 10-15 minutes, gradually adding to the amount of material being read before looking up and making pictures. Eventually, stopping and looking up may become unnecessary, as the brain will automatically use the strategy you have been rehearsing it to use.

Introduce the strategy by doing it with the entire class using the flying fish story. Have the class use a clear board or wall space, preferably white, as their "movie screen." Tell them that you are going to make a movie together about a flying fish. You will tell them about the fish, and their job is to make a movie of the information so that they will be able to remember all the detail for a quiz at the end.

Before starting to read the information, ask them what they already have in their picture from your introducing the subject. Then read the description at a reasonably fast pace, one sentence at a time. Pause for them to make pictures or concepts on the screen, then ask them what they have added to their movie. Add your own ideas as appropriate. The story in the appendix has some ideas after each sentence, but any idea that helps an individual remember is fine.

There is no right way to do this movie. The more outrageous and humorous the pictures are, the easier they will be to remember. The operating question is, "Is it useful?". Participants get ideas from each other and quickly begin to have fun with the process.

When the story is done, go back and "test" the class orally, having them refer to the "movie" for the answers. Then ask them how much they think they would have remembered if they had each read the article silently.

SPELLING STRATEGY

(Handout - Spelling Mindmap)

A detailed spelling strategy is in the appendix. If you have never used it before, be sure you are comfortable with it prior to introducing it. Sometimes this means practicing with a friendly partner or in front of mirror. It really is easy, but you do need to "get the hang" of it.

When you introduce the spelling strategy in this first part, use only simple words, 3 or 4 letters, then maybe 5. Ask for a volunteer from the audience and demonstrate it first. Usually someone volunteers who wants to improve their spelling. Go through the strategy with two to three words. Spelling backwards tends to be a real convincer for everyone, since most people are not ready to do that even with simple words. Have fun with it. Do not do large words at this stage. Use word(s) from cooking terminology.

VOCABULARY STRATEGY

To remember the word meaning (vocabulary strategy), simply create a picture or concept of what the word means. The concept may be different for each person as they draw from their different experience, but it needs to result in their knowing how to use the word. Once they have the concept, add the "picture" of the word from the spelling strategy and take a "snapshot". Use word(s) from cooking terminology.

SUMMARY/NEXT STEP

Summarize what's been covered (concepts, brain warm ups and hand tools). What's next is putting power to those tools and adding flexibility.

Ask students to bring their handouts back to the next class if workshop is done in 2 sessions.

TEACHER'S INFORMATION

PART TWO

REVIEW WHAT WAS COVERED IN THE FIRST PART.

Ask for any observations or feedback.

REPEAT WARM-UP EXERCISES.

CHUNKING

(Handout - Chunking Mindmap)

Chunking is a very simple but powerful concept. The term is used in NLP models. It simply means breaking things into small pieces. Examples of chunking that we do everyday include social security number, phone numbers, credit card and bank account numbers. If you write eight numbers on the board and ask class members to read them, they will pick multiple ways to chunk the number.

Chunking is a process we do naturally and we each tend to do it based on our own experiences. There is no one right way to chunk - only so that it is effective.

Re-introduce the spelling strategy to illustrate chunking applied to a large word. You can do this walking the whole class through the word. See the Spelling Strategy for the specific steps. Use word(s) from cooking terminology.

Reiterate that chunking is natural and is an appropriate strategy for any age. Unfortunately, as adults, we think we should be able to take bigger bites, but chunking is a perfect strategy for us too. The guide is, if you're having trouble with the learning task, chunk it down.

Talk about other uses of chunking, related rules, and study results such as:

1. Short term memory holds 7 plus or minus 2 pieces of unrelated information before overloading (or 5-9 pieces).
2. Studies show that we tend to remember information at the beginning and end of sessions better than what is in the middle. Instead of studying for one hour without a break and having 1 beginning and end, quadruple what you will naturally remember by taking 4 quick breaks. Get up and stretch, do warm-ups, etc.
3. Projects
4. Chapters/books
5. Charts or tables
6. Lists (vocabulary, terms)
7. Other

MINDMAPING

(Handout - Spelling Strategy, Outline Format)

Hand out the outline form of the spelling strategy. Have participants refer to both their mindmap and outline of the strategy. Have a flip chart spelling mind map on the board for reference.

Point out the differences, including

Mindmap	Outline
Right brain - picture	Left brain - verbal
See whole at a glance	Sequential, line by line
See relationships	Can't see relationships easily
Flexible to add to	Difficult to add to earlier points
Enhance with color	Black and white
Key words only	Includes lots of filler words (the, in, to, etc.)

Mindmaps can help build relationships between thoughts and can be used to help organize material before starting to write. Students will have an opportunity to try mindmapping in conjunction with the next topic, previewing.

PREVIEW

(Handout - Preveiw Mindmap and test on sauces, HO 9 - HO 13)

We've probably all heard about previewing material, but most of us don't do it. Why bother? Use the flying fish story as an example. What if you hadn't told them the subject? You just proceeded to describe an animal that flies, how far, how fast, etc.

Ask the class what they would have put in their picture. Then ask what would have happened when you added water or fins to the story. They would have had to adjust their pictures. In this example, your providing the subject of the story allowed them to develop an appropriate frame of reference. It enabled them to access their stored information about fish as opposed to birds.

The function of previewing is to provide an outline or sketch of the picture or movie they are about to make. Then when detail is provided, they have a ready-made structure to hang it on.

Go through the text on sauces, showing ways to preview the information, including noting titles, looking at pictures, reading the captions, picking out vocabulary, and reading section headers. Ask them to think about what they now know about the subject matter - prior to reading the text. Do a brief mindmap of the information already gathered, soliciting ideas from the class.

Next, have the students pick a section of their choice to read and mindmap. (The mindmap can be done on normal paper with ink or pen, but it really helps to give them large computer paper and a colored marker.) Reiterate that there is no right way to do a mindmap, though big is better. And have fun with it.

Ask for comments and questions. Remind them of the uses and its flexibility. Point out that for learning the sauces, they might find it useful to make a master mindmap that has the categories of information preformatted so that they can fill in the particulars for each sauce. Each mindmap could be studied individually(chunking) and the information for each sauce is presented in the same pattern (right brain likes patterns).

REVIEW

Talk about the retention curve. If no review of material is done within 24 hours, we lose a high percentage of the information by 48 hours. If we review the material within 10 minutes, again within 24 hours and then periodically, we increase our retention dramatically with minimal effort.

Within 24 hours, review includes "re-viewing" (rereading or re-looking), thinking about what the material means to you, outlining or mindmapping the material, deciding how to use the material, etc.

When working on lists, learning 3-5 words at a time, and reviewing prior words after each new one is learned helps. Before starting on more new words the next session, review those already done, then tackle new words repeating the review pattern.

Reviewing information is not the same as efforting and struggling to remember it. Also, reviewing can be as simple as putting information that you want to remember on the walls around you in your visual space - large enough to easily see every time you walk by.

OPEN THE LENS

This deals very quickly with writers block and relates to the reading comprehension strategy. Once pictures are made, they hold the answers for writing or for a test. However, sometimes we forget to "look at our pictures", or access our screen. The simple solution is to look "up" at the pictures.

Sometimes, we see our pictures but they are too narrowly focused. When this happens we need to "open the lens" and expand the picture. For example, a medical student is asked to write about HIV. To access all his information, he might start with a picture of an HIV patient in his hospital room and ask himself the following questions:

1. Who, what, when, where, and why about his care. (5W's)
2. How did he get there? (cause/effect)
3. What happens when he leaves?
4. What is the impact on his family, church, community?

5. What are the financial issues?

These questions would help the student access a breadth of knowledge related to HIV and important to successful test taking.

QUESTIONS AND ANSWERS

Ask students for questions.

When done with the questions, refer to participant goals on the flip charts to see that they have been met.

SUMMARY

Summarize concepts. Point out that the students now have new tools. All new tools take practice to become proficient. What they're doing when they're practicing is training the brain to engage in that strategy automatically in the future - unconsciously and without effort. But they have to give their brain some deliberate practice - a little bit every day.

EVALUATION

Have participants complete and leave evaluations.

BIBLIOGRAPHY/SOURCES

Mindmapping, Joyce Wycoff

Heart of the Mind, Steve and Connirae Andreas

Peak Performance Strategies, New Pathways to Learning

Brain Gym for Teachers, Paul Dennison

Meta-cation 1, 2 and 3, Sid Jacobson

Power Learning, Ronald Gross

Learning Connections, Compilation of learning strategies

APPENDIX A
MEET YOUR MIND QUESTIONS

1. How many pieces of information can you keep track of in short term memory at one time?

7 plus or minus 2 pieces of unrelated information, or 5-9 pieces.

For example, think of when you make a grocery list. You're leaving work and remember you need butter. Do you write it down? You're getting in your car and you remember you need milk too. Do you write them down? Then you remember you need brownies. Do you make a list yet? Then you remember you need black shoe polish. Do you write it down yet? Most people will make a list, "before they forget" at 4-5 items. It's this rule of short term memory in effect.

2. How are auditory and visual memory different?

Auditory memory tends to be short term, rote, verbal or sounds and sequential. Visual memory tends to be long term, pictures or concepts, random access and fast.

3. How do you know that you know?

When you see someone approaching that you believe is your friend, but she's not yet in focus, how do you know that it's her when you can see her? One of our strategies is that we get a feeling of familiarity or match. That feeling is different than when we still can't focus. We use those same feelings in the spelling strategy.

APPENDIX A:
MEET YOUR MIND QUESTIONS
(cont'd)

4. Can exercising affect learning?

Yes, you can use exercises to get the brain warmed up and into whole brain thinking.

5. Which side of the brain is better for learning, right or left?

Neither. A whole brain is always better than 1/2 a brain. You need both sides working together.

Some of the learning strategies we'll be dealing with rely on visual processing, so we will also pay attention to ways of presenting material that the right brain likes. But you need both sides.

6. Why do we say, "A picture is worth a thousand words"?

Pick any picture - in the room or in a book. If you described this picture to your students verbally and had them imagine it, it would take a lot of words, a long time, and the picture for every student would differ from the others and the one you are describing. With a picture, you see the whole at once. With words, you might need to read pages of description.

7. What are examples of "chunking" information?
phone numbers, social security numbers, account numbers, the alphabet rhyme(abcd efg hijk lmnop, etc.)

APPENDIX B:
BRAIN WARM-UPS

Developed by Paul Dennison, author of Brain Gym.

A. Brain Buttons (done standing) - One hand massages the soft tissue under the clavicle and to the right and left of the sternum, while the other hand rests on the navel. Stimulate for 20-30 seconds, then change hands and repeat.

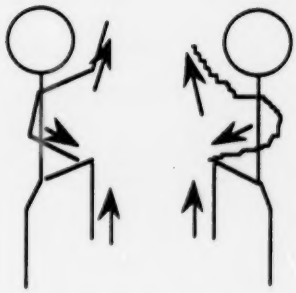
B. Variation on Earth and Space Buttons (done standing) -

1. One hand rests on your navel, other hand massages lips with palm facing the face - the index finger on the top lip, middle finger on the bottom lip. Change hands and repeat.

2. One hand rests on tailbone, other hand massages lips as above. Change hands and repeat.

APPENDIX B:
BRAIN WARM-UPS
(cont'd)

C. Cross Crawl (done standing) - Raise one arm in the air then bring it down to opposite knee while bringing that knee to meet the hand. Face forward.



D. Lazy Eights(done standing) -

1. Facing forward, head staying still, trace the lazy eight pattern in the air with one hand, thumb up. Track the thumb with your eyes. Always start movement in the middle and go up. Make the eight as full and even as possible while tracking evenly with eyes.

Do 2-3 with each hand, then 2-3 with both hands together. Best done slowly to support eye tracking.

2. Variation
Do same pattern with no eye tracking and make eight as big and full as possible. Face forward. This relaxes the body.

APPENDIX B:
BRAIN WARM-UPS
(cont'd)

E. Whole Brain Posture (Dennison calls this "Cook's Hookup) (Done while seated) -

1. Clasp hands in front of you, interlacing fingers. Notice which thumb is on top. Unclasp hands.

2. Whichever thumb was on top, with arms extended to the front, put that wrist over the other. Turn palms to the floor, then continue turning palms to meet each other. Clasp together. Rest arms in lap or draw them to the chest.

3. Whichever thumb was on top, cross that ankle over the other.

4. Take several deep breaths through the mouth and exhale slowly.

All of these exercises can be used to promote studying, test taking, or other stressful situations. They can be used as a study break. The Whole Brain Posture is especially useful for calming and centering.

The exercises can be done separately. It is recommended that they be done at least daily, 5-10 minutes. While they activate the brain at the time, the brain will return to its "norm" until it is retrained with a new habit.

APPENDIX C:
ABOUT THE FLYING FISH

(Pictures include water and a fish - possibly with wings)

A rather unusual fish that can fly through the air for relatively extensive distances is called the flying fish. (Participants may add color, height and motion to their movie.)

It may fly distances of merely a few feet, but may also soar through the air for distances ranging up to 200 yards. (200 yards is equal to two football fields.)

This particular type of fish usually only flies when it is pursued by a predator. (I immediately added a shark pursuing the fish.)

The peculiar flying fish may stay aloft only momentarily but it may remain airborne for a duration of up to ten or fifteen seconds. (An hour glass, a stop watch stopped at 10-15 seconds, a digital clock-all are possibilities.)

Among the creatures of the ocean who prey on the flying fish are tuna, sharks, dolphins and porpoises. (Charlie the Tuna, a can of tuna fish, Jaws, Flipper.)

If the flying fish is endangered, it is able to use its tail to strike a sharp blow on the water's surface to give it added momentum in making its ascent. (Add a beaver's tale to the picture.)

When the fish makes its exodus from the water it may attain speeds of up to 35 miles per hour. (Speedometer pegged at 35, a 35MPH street sign.)

APPENDIX C:
ABOUT THE FLYING FISH
(cont'd)

Once the fish is airborne, it spreads its pectoral fins and proceeds to use them as wings. (Fins enlarged to be wings.)

These fins are not actually wings but elastic membranes that enable them to be flexible. (Elastic or rubber bands, duck webbing.)

There are approximately 65 species of this unique fish, and they commonly inhabit only the warm waters of the Atlantic Ocean. (Add the number 65, a picture of Florida, Epcot, a fish on a lounge chair drinking orange juice.)

APPENDIX D:
EYE ACCESSING QUESTIONS

Visual Remembered
Think of your house or apartment. See yourself walking into the front room. How many windows are there? What color are the walls? Now go into the kitchen. What color are the walls? The drapes? How many windows are there?

Visual construct
What would your kitchen look like if it had 2 more windows? What would it look like if it were painted bright red with black trim? Picture a giraffe. What would it look like if it were black with yellow spots?

Auditory Memory
Sing the Star Spangled Banner or another song that you know to yourself. What is the fourth phrase? Recite the alphabet to yourself. What is the eighth letter?

Auditory construct
What would the Star Spangled Banner sound like if it were sung by Donald Duck? What would a lion sound like with the bark of a poodle?

Self-Talk
What do you say to yourself when you screw up? What do you say to yourself when you do a great job?

Kinesthetic
How would your feet feel if they were in shoes two sized too small? How comfortable are you in your chair right now? Feel the table or the side of the chair. How does it feel? Who is your most favorite person and how do you feel about him or her?

APPENDIX E:
SPELLING STRATEGY

This appendix provides you with background information on the concepts, teaching methodologies and materials used in this curriculum. We have presented the information as simply as possible, but recognize that if the concepts are new to you, the method may seem a bit cumbersome. We encourage you to try the techniques - they have worked extremely well for us providing faster and easier gates into spelling knowledge than previously used methods.

Our primary teaching tool for spelling is the following spelling strategy, which is based on the Neuro Linguistic Programming (NLP) Spelling Strategy modified by New Pathways to Learning. The NLP Spelling Strategy was initially developed by modeling and carefully observing good and bad spellers in order to determine what internal processes each one used. It was found that most good spellers "see" the word and then have a feeling that it is right, wrong or they don't know. Poor spellers do not use this strategy. They often process the information auditorily, never accessing their visual memory.

This information from the modeling was then used by New Pathways to Learning to develop a precise and step by step way to teach a person "how to spell" and how to access the most useful "brain tools" for the task. The following adaptation of the strategy was developed by Learning Cœonnections and is used with their permission.

PRINCIPALS BEHIND SPELLING STRATEGY

1. Our eyes generally move up when we do visual internal processing. If we want a student to use visual processing, we can present work "up".

2. Our eyes generally look down when we are internally processing feelings. if we want a student to access feelings, we can guide his eyes down by gesture or placement of work.

3. Not every student is aware of his internal visual processing. Most every student can learn to use it.

4. Students who do internal visual processing may not know how to use it for memory tasks such as spelling and remembering vocabulary.

5. Chunking (breaking down of words) is very helpful. Each student chunks differently. Students can be made comfortable with the notion of chunking by pointing out the places where we naturally chunk information in real life to remember. For example, we chunk phone numbers, social security numbers, the way we read large numbers, etc. Chunking is not just for kids - we all use it.

6. Visual processing is stimulated by right brain presentation methods, i.e. color, size, shape, patterns. Incorporation of these elements throughout the presentation of content is helpful.

7. Regular use of the strategy, review, and integration exercises are critical to establishing an automatic spelling habit.

ABBREVIATED STRATEGY	DETAILED STRATEGY
1. Select an area that the class can use as a "visual screen".	The "visual screen" can be a flip chart, white board or light colored wall and should be centered in front of the students. When students look at this area, their eyes will be looking "up" with no added instructions.
2. Print symbols, numbers, letters or words on a card.	Use of symbols or random numbers and letters enables students to try the strategy and gain confidence without the pressure of spelling correctly. We normally start with three symbols, letters or numbers on a card and then add as there is success. Letters are printed using lower case except where a capital is required. Lower case printing has more shape and assists the right brain in making visual discriminations.
3. Decide if chunking is necessary.	Any word that is more than one syllable should be chunked initially and it may be appropriate to chunk such words as "watch". Chunking a word to assist the student in easily building his visual picture can be done any way - it has nothing to do with syllabication rules. The students are very good at doing their own chunking because they do it based on what makes sense to them.

ABBREVIATED STRATEGY	DETAILED STRATEGY
3. Decide if chunking is necessary. (cont.)	Once it has been decided to chunk a word, you simply fold the card after each chunk and do steps 4 through 6 for EACH chunk. When the students write each chunk, they should put it on a separate line so that they're writing and checking only the picture they're working on. Once all chunks have been done, repeat the same process with the first two chunks combined. Then repeat with the first three combined, then the first four, etc., until the word is complete. Never go from individual chunks to three or more combined, always build up. Does this seem cumbersome? Try it. It's not and it really helps students easily handle large words.
4. Build and reinforce visual remembered image. a) Hold card up against the "screen" and have students quickly trace it with their eyes. b) Remove the card, point to where it was and have the students "notice their picture".	Building and reinforcing the visual image can be done in a number of different ways. The steps presented here work. Their order can be changed. As students get comfortable and are increasingly competent with the strategy, steps can be dropped. However, as you increase word size and complexity, you may wish to reinclude those steps to ensure success.

ABBREVIATED STRATEGY	DETAILED STRATEGY
c) Hold card up against the "screen" and have students trace the letters with their finger in the air. Repeat (b) above.	The specific verbiage is not critical - there is no magic in the wording. Some things to avoid are:
d) Hold card up against the "screen" and ask what letters are below and above the line. (Two imaginary lines are drawn below and above the middle part of letters. The tale of a "p" would hang down below the bottom one, and the stem of a "d" would stick up above the top line.) Repeat (b.)	a) "see if or try" to make a screen or picture. (This creates the possibility of failure.)
e) Hold card up against the "screen" and ask if there are any "twins" (two of the same letter right together.) Repeat (b.)	b) "Can you ...?" (This leaves the option of a "no" answer. Then what do you do? Assume they can follow your instructions and give them choices instead.)
f) Hold card up against the "screen" and ask what the first letter is and what the last letter is. Repeat (b.)	c) "Is it correct?" While the ultimate objective is correct spelling, the strategy is about building and reinforcing good, clear pictures that can be used over and over for spelling. For students long frustrated with spelling, eliminating the use of "correct" simply removes a bit of pressure. A picture that is not clear enough can be made clearer. A picture that is not "correct" is "wrong".
	Modeling each step and guiding students through the first couple of times is helpful. As you move forward, you won't need to explain things.

ABBREVIATED STRATEGY	DETAILED STRATEGY
5. Have the students get a good and clear picture, and when they have it, "write it when you're ready". Have students check their picture for the answers if they're having any trouble.	Be sure students take the time to make a picture before writing. If students do not have a good clear picture at this point, you can ask them to tell you about their picture. Very often, there is a specific part which is not clear. Reinforce it with color and repeat step 4. If the whole word is fuzzy, repeating step 4 may be what's needed. Additionally, check to see if the word needs to be chunked smaller. Also, the student could actually trace the letters on the card for additional kinesthetic input. Whatever the student says about the picture, use it to determine your next action.
6. Have the students "see" their picture (pointing at the "screen"), look at what they wrote, and then notice how it "feels" or if it's a match.	"See" how it "feels". What the student should be seeing is the word - just as if it were a street sign sitting in the air.

ABBREVIATED STRATEGY	DETAILED STRATEGY
6. Have the students "see" their picture (pointing at the "screen"), look at what they wrote, and then notice how it "feels" or if it's a match.	The "feel" part of this is the checkpoint. The feeling will let the student "know that he knows" or not. The "I don't know" or "I'm not sure" feeling can be compared to when we look in a phone book for a number, mumble it to ourselves as we walk to the phone, dial the number part way and then get this "feeling" that what we are dialing is not the same as the number that we read. The, "I know that I know" or "I know that I do not know" feeling is like the feeling we get when we think that someone walking towards us on the street is someone we know. When the person actually comes into focus, we get a feeling of recognition or a match to our prior experience.
7. Reinforce by having the students spell the word out loud from the "picture". An optional step is to then have them spell it backwards, pointing at each letter on the screen in reverse order.	Spelling backwards can be a fun way to reinforce the process and instill confidence. It also confirms to you, the instructor, that the student has a good picture. Additionally, spelling backwards cannot be done phonetically - it has to be done by "reading" a picture backwards.
8. Reinforce by reviewing and using the words.	Reviewing and using words helps establish words in long term memory. Reviewing can be done in three stages:

ABBREVIATED STRATEGY	DETAILED STRATEGY
8. Reinforce by reviewing and using the words. (cont.)	a) Hold the card up in front of the "screen" and say the word. have the students say the word. Remove the card and while pointing to the "screen", say the word. Then have the students say the word while looking at the screen. Repeat these two steps once. b) Hold card in front of the screen and quickly remove it. Have the students get a good clear picture of it, write it and check it. If there is uncertainty, find out what is happening with the picture, then use step 4 of the strategy to reinforce the picture as required. Repeat the first two steps until you're sure that the word will be remembered by just saying it - without presenting the card for a quick reminder. c) Say the word, have the student get a picture, write it, and check it. Using words can be done by making sentences verbally, writing sentences, doing word matches, crossword puzzles, etc. Your creativity is the only limit.

ADDITIONAL NOTES:

After students learn to use this basic strategy, there are ways to expand its use.

1. They can create their own individual "screens". They can test placement to "see" where the words are the clearest and easiest to see. This will normally be the same place they access visual memories and is often on the upper left. But, each of us has our own way.

2. They can go to their "screen" to see what they have for a word they want to spell but have not learned through this strategy. When they do this, there are several things that often occur.

    a) No picture - they need to build one.

    b) Unclear picture - they need to clarify it.

    c) More than one version. They need to write down what is there and check for the correct version in the dictionary. Then they should "erase" all but the correct version, or if it is not correct, clear the screen. They can then use the spelling strategy to build the word.

APPENDIX F:
SAMPLE CLASS ANNOUNCEMENT

Meet *YOUR* Brain!

Train *YOUR* Brain for *EASY* Learning

Be prepared to meet your brain. This workshop will help you handle the classes you are taking this fall more easily. Have fun getting to know and experience the ways in which your brain processes information.

You will gain concrete tools to:

- **improve your reading comprehension and retention.**
- **handle memory tasks such as spelling and vocabulary more quickly and easily.**
- **reduce test anxiety.**

WHEN:

WHERE:

For More Information, contact:

Offered by Emily Griffith Opportunity School and _____(your organization's name)_____.

HANDOUTS

MEET YOUR MIND

1. How many pieces of information can you keep track of in short term memory at one time?

2. How are auditory and visual memory different?

3. How do you know that you know?

4. Can exercising affect learning?

5. Which side of the brain is better for learning, right or left?

6. Why do we say, "A picture is worth a thousand words"?

7. What are examples of "chunking" information?

READING COMPREHENSION AND RETENTION STRATEGY

1. Physiology, Visual anchor/screen

2. Use material of real interest

3. Read, stopping after a couple of sentences, to make pictures of what is being read. Reread and enhance pictures if necessary. Chunk it down as necessary.

4. Test yourself to demonstrate that the answers are in your pictures.

5. Practice until comprehension is excellent.

6. Repeat the process increasing the chunks of information you read before making pictures. If you run across a word that you do not know, mark it or write it on a list for review later. The goal here is reading comprehension, not word recognition or vocabulary.

SPELLING STRATEGY

1. Physiology, Visual anchor/screen.

2. Select well constructed words. Start with easy words to build confidence and chunk up. Use fun words or words you are interested in.

3. Print word (or symbols) on card in lower case. Decide if the word needs to be chunked down. Set the card up and in front of you. Then, do the following, alternating looking at the card and looking at your screen.

   a) Trace it with your eyes.

   b) Note below the line, above the line, doubles, first letter and last letter.

   c) Snap a picture.

   d) Remember what the word looks like or "read" the sign or picture.

   e) Write the word when ready, using picture to check against.

   f) Look up at the picture of the word, compare it to the written word and "see if it feels right".

   g) Spell the word out loud from the picture.

SPELLING STRATEGY
(cont'd)

4. Review words by holding up cards quickly, removing them and then "seeing" them.

5. Write and speak the words in a sentence for homework.

6. Recycle words in subsequent sessions until you're sure they're locked in. Then keep them for periodic review.

7. Future pace to classroom, test environment or other uses.

NOTES

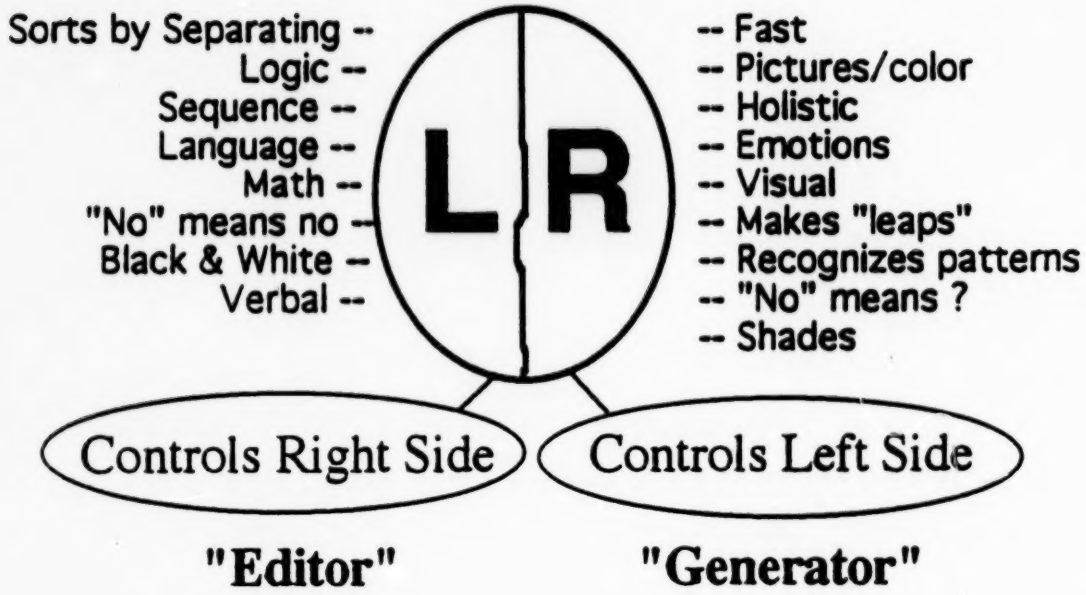
1. Repeat step 3 as needed to ensure solid encoding.

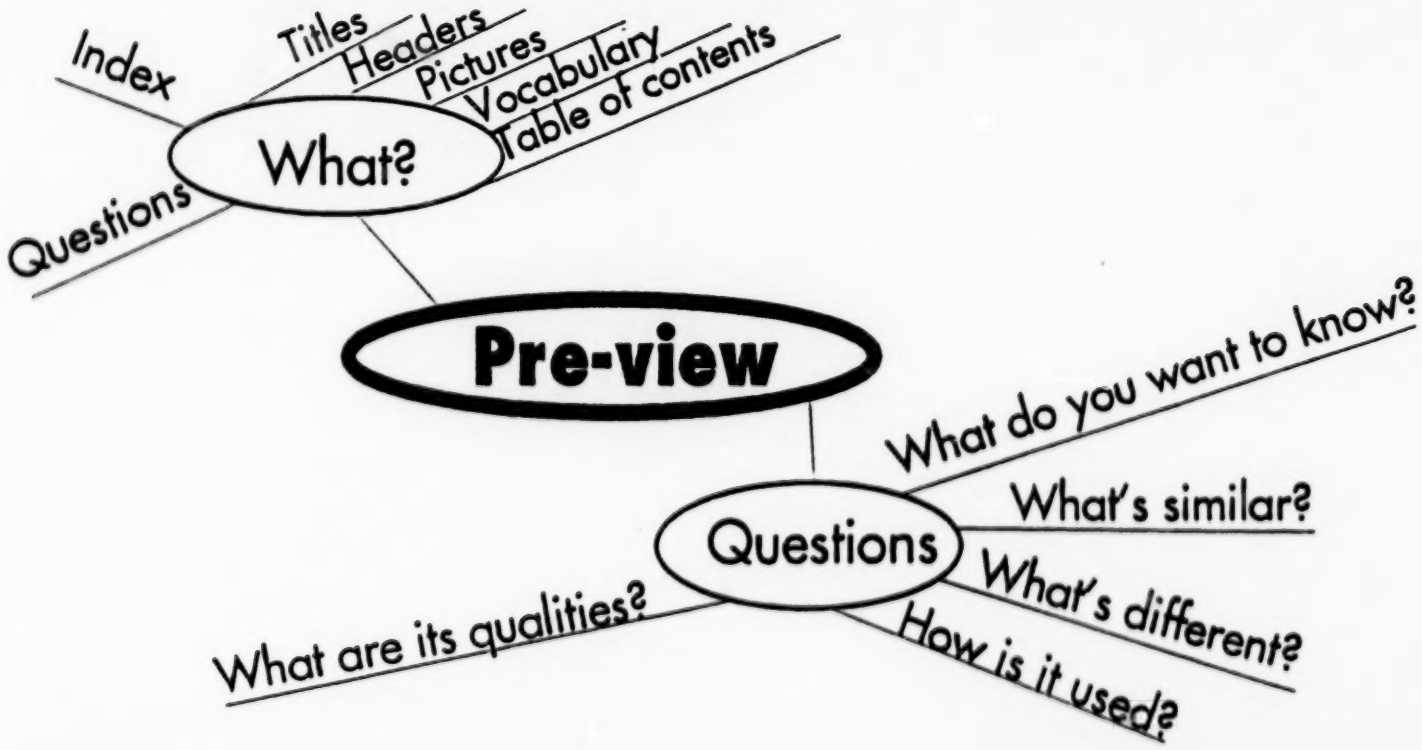
2. You may need to practice enlarging, enriching or clarifying the "picture" initially. Playing with spelling the word backwards can be helpful in stabilizing your "picture".

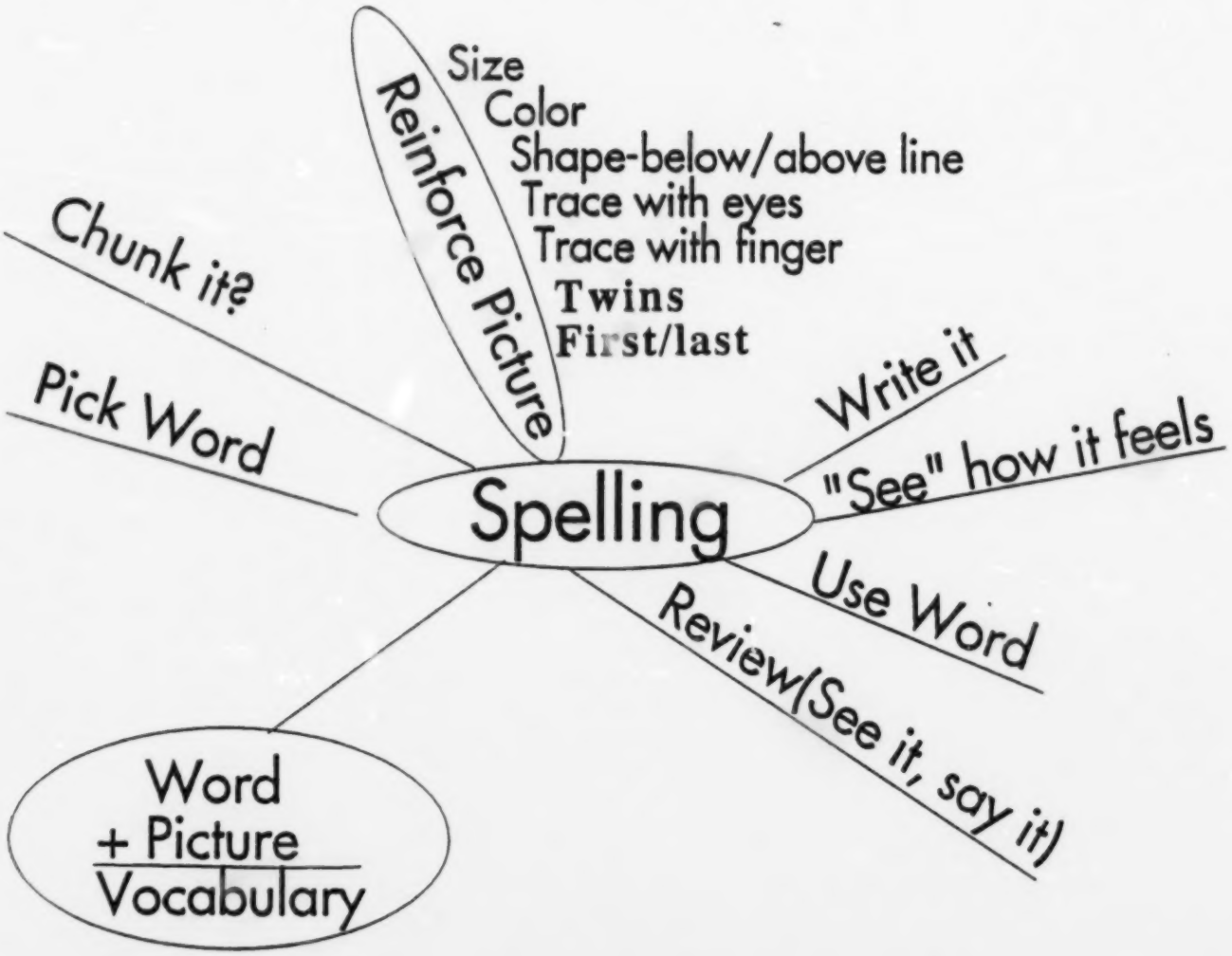
3. Sometimes it is useful to also trace the word on the card with your finger in step 3.

4. If you feel yourself slipping to auditory processing, look back up to your visual processing area.

Left and Right Brain Characteristics




Pre-view
What?
Index
Titles
Headers
Pictures
Vocabulary
Table of contents
Questions
Questions
What do you want to know?
What's similar?
What's different?
How is it used?
What are its qualities?


Size
Color
Shape-below/above line
Trace with eyes
Trace with finger
Twins
First/last
Reinforce Picture
Chunk it?
Pick Word
Write it
"See" how it feels
Spelling
Use Word
Review(See it, say it)
Word
+ Picture
Vocabulary

ABCD EFG...
Eat elephant-
1 bite at a time
Examples
110-30-2828 (SSN #)
303-240-3111 (phone #)
Chunking
5 - 9 Chunks = Overload
Lists
Time
What?
Reading
Words
Patterns
Syllables
Writing
Outline
Sequence
Correctness
Study

BÉCHAMEL

Yield: 1 gallon (3.75 liters), medium consistency

Milk	1 gallon	3.75 liters
Pale roux	1 pound	455 grams
Onion, find-dice, smothered in clarified butter	2 ounces	60 grams

1. Scald the milk and pour it over the roux. Stir vigorously until smooth.
2. Add the smothered onions.
3. Simmer for 30 minutes.
4. Adjust the seasoning to taste with salt, white pepper, and nutmeg.
5. Strain through a double thickness of cheesecloth.

Note: For heavy consistency, increase the amount of roux to 20 ounces (670 grams) per gallon.

1
Sweat the onion.

2
Add the milk and bring to a simmer.

3
Incorporate the roux.

4
Bring to a boil.

5
Pull the pot off center.

6
Skim.

7
Stir frequently.

8
Simmer.

9
Add nutmeg.

10
Finish, garnish, use, or cool and store.

Béchamel

Béchamel is a white sauce made by thickening milk with a white roux and simmering it with aromatics. Originally, béchamel called for an amount of lean veal: however, modern practice rarely includes it. Although its importance as a grand sauce has diminished somewhat, béchamel and its derivatives are still important in the contemporary kitchen (see fig. 17-10). Figure 17-11 provides an example of a béchamel. Note the color, body, and consistency.

Mise en Place

1. Milk.
2. White roux, prepared with butter or oil as the fat.
3. Aromatics: sweated, minced onion, a sprig of fresh thyme, a bay leaf, nutmeg to taste: or an onion studded with piece of bay leaf and clove (oignon pique).

Method

1. Sweat the minced onion in a small amount of butter until the onion is translucent.
2. Add the milk, thyme, and bay leaf. Bring the milk to a simmer.
3. Incorporate the roux, whisking well to remove all lumps.
4. Bring to a full boil, then reduce heat to a bare simmer.
5. Pull the pot slightly off the center of the heat source to encourage any impurities and fat to collect at one side of the pot.
6. Skim as necessary throughout preparation.
7. Stir frequently. Scorching is a real concern in the preparation of béchamel.
8. Simmer for a minimum of 30 minutes. (Some chefs prefer to simmer the sauce up to 1 hour.)
9. Add the grated nutmeg to taste.
10. Strain the sauce through a chinois lined with rinsed and wrung-out cheesecloth.
11. Finish an/or garnish according to the desired result, or properly cool and store it.

GLOSSARY

Chinois:	A conical sieve used for straining and pureeing foods.
Crème Anglasie:	Custard.
Crème Brulee:	Custard topped with sugar and caramelized under the broiler before service.
Crème Fraiche:	Heavy cream cultured to give it a thick consistency and a slightly tangy flavor; used in hot preparations since it is less likely to curdle when heated than sour cream or yogurt.
Crème Pâtisserie:	"Pastry cream." Custard made with eggs, flour or other starches, milk, sugar, and flavorings, used to fill and garnish pastries or as the base for puddings, soufflés, and creams.
Mirepoix:	A combination of chopped aromatic vegetables - usually two parts onion, one part carrot, and one part celery - used to flavor stocks, soups, braises, and stews.
Mise en Place:	"Put in Place." The preparation and assembly of ingredients, pans, utensils and plates or servicing pieces needed for a particular dish or service period.
Napper/Nappé:	To coat with sauce; thickened.
Roux:	An appareil (a prepared mixture of ingredients used alone or as an ingredient in another preparation) containing equal parts of flour and fat (usually butter) used to thicken liquids. Roux is cooked to varying degrees (white, pale/blond, or brown), depending on its intended use.
Translucent:	1-Permitting the passage of light, 2-Transmitting and diffusing light so that objects beyond cannot be seen clearly.

MOTHER SAUCES

BÉCHAMEL

1
Sweat the onion.

2
Add the milk and bring to a simmer.

3
Incorporate the roux.

4
Bring to a boil.

5
Pull the pot off center.

6
Skim

7
Stir frequently.

8
Simmer.

9
Add nutmeg.

10
Finish, garnish, use, or cool and store.

SAUCE ESPAGNOLE

1
Sweat the mirepoix.

2
Add the tomato puree: sauté until lightly caramelized.

3
Add the brown roux and heat thoroughly.

4
Incorporate the brown veal stock.

5
Sinner 2 1/2 to 3 hours; skim the surface as necessary.

6
Strain the sauce, cool, and store properly.

TOMATO SAUCE

1
Render the fat from salt pork.

2
Add the mirepoix and sweat.

3
Add the remaining ingredients and bring to a simmer.

4
Stir frequently.

5
Simmer.

6
Strain.

7
Puree.

8
Finish, garnish, use, or cool and store.

HOLLANDAISE

1
Make the reduction.

2
Add the egg yolks and blend.

3
Place the bowl over simmering water.

4
Whip.

5
Gradually add warm butter and whip.

6
Strain.

7
Adjust seasoning and serve, or hold.

DEMI-GLACÉ

1
Combine brown veal stock and sauce espagnol.

2
Bring to a boil.

3
Pull the pot off center.

4
Simmer.

5
Skim.

6
Transfer to a smaller pot.

7
Strain, use, or cool and store.

VELOUTE

1
Combine stock and roux.

2
Bring to a boil.

3
Pull the pot off center.

4
Skim.

5
Stir frequently

6
Simmer.

7
Strain.

8
Finish, garnish, use, or cool and store.

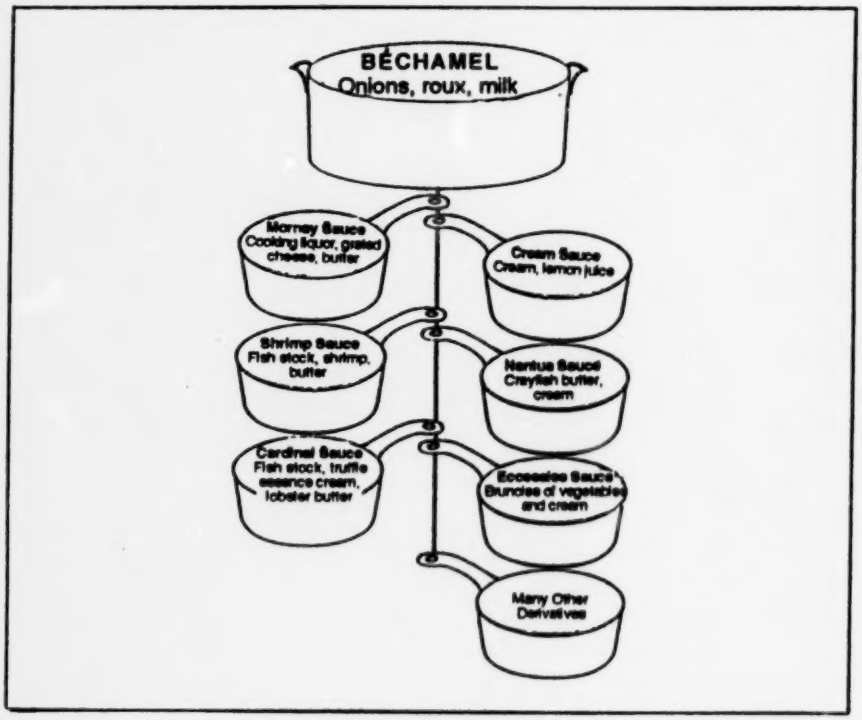
BÉCHAMEL AND ITS DERIVATIVES

When properly prepared, béchamel should meet several criteria of flavor, color, clarity, body, and aroma.

The flavor is creamy, reflecting its base liquid, milk. There should be no taste of roux if the sauce has been allowed to simmer for a sufficient time. Béchamel should have the color of heavy cream - slightly off-white. there should be no hint of gray.

Although béchamel is essentially opaque, through proper cooking and skimming the finished sauce will be lustrous, with a definite sheen. It should be perfectly smooth, with absolutely no graininess. Proper skimming and straining of the sauce will assure the correct texture. The sauce should have a noticeable body, thick enough to coat the back of a spoon (nappé,) yet still quite liquid. Although a heavy béchamel does have applications in the kitchen, it is not appropriate for use as a sauce.

The aroma should be that of cream. A slight hint of nuttiness from the roux will be apparent, but it should not overpower the milk aroma. The onion, thyme, and nutmeg contribute flavor accents but should not be overly strong.



Béchamel and its derivatives

BEST COPY AVAILABLE

BAKING MISE EN PLACE

Thickeners

Sauces and puddings can be thickened by using various ingredients, including eggs, gelatin, and starches such as flour, cornstarch, or arrowroot. These thickeners may be used to lightly thicken a mixture, as for a sauce, or to produce an item that is firmly set, such as a Bavarian cream.

The quantity and type of thickener, as well as the amount of stirring or other manipulation, will determine the finished product's properties. For example, if a custard is cooked over direct heat and stirred constantly, the result will be a sauce that pours easily. The same custard cooked in a bain-marie with no stirring at all will set into a firm custard that can be sliced.

Uses

Arrowroot and Cornstarch
preferred for thickening sauces, puddings, and fillings where a translucent effect is desired. If these thickeners are to be diluted before incorporation with other ingredients, they should be mixed with a small amount of a cool liquid.

Eggs
(whole eggs or yolks) may be used either alone or in conjunction with other thickeners. As the egg proteins begin to coagulate, the liquid becomes trapped in the network of set proteins, producing a "nappé" texture, in which the sauce will coat the back of a spoon when the spoon is dipped into the sauce and withdrawn.

Flour
is commonly used to thicken items such as crème pâtisserie. In order to prevent lumping, the flour and sugar are often stirred together before they are combined with the liquid. Flour-thickened sauces are also often additionally thickened and enriched with eggs. The eggs must be tempered to prevent the sauce from curdling.

Gelatin
when added in the desired amount, can produce light, delicate foams (Bavarian creams, mousses, and stabilized whipped cream, for example) that are firmly set. Such foams will retain a mold's shape and can be sliced. Gelatin is an animal protein found in bones. (It is this protein that causes stock to gel as it cools.) Gelatin powder or sheets are frequently used for a variety of bakeshop items. Before use, gelatin must first be softened (also known as "bloomed") in a cool liquid. Once the gelatin has absorbed the liquid, it is then gently heated to melt the crystals. This is accomplished either by adding the softened gelatin to a hot mixture, such as a hot custard sauce, or by gently heating the gelatin over simmering water.